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**OLEFIN OXIDE CATALYSTS**

**ABSTRACT**

The present invention provides an improved oxidation catalyst composition containing a catalytically effective  
10 amount of silver and a rubidium promoter deposited on a carrier, which rubidium metal promoter provides a quantity of rubidium at least 5  $\mu$ mole and less than 60  $\mu$ mole per gram of catalyst composition. The catalysts of the invention are deposited on carriers such as  $\alpha$ -alumina  
15 and silver-bonded calcium carbonate. The invention is also directed to a process for the oxidation of olefins, which process involves reacting the olefin with oxygen in the presence of a catalyst composition having a catalytically effective amount of silver and a rubidium  
20 promoter deposited on a carrier, wherein said rubidium metal promoter provides a quantity of rubidium of at least 5  $\mu$ mole and less than 60  $\mu$ mole per gram of catalyst composition.